

## Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (original) A method for performing liquid chromatography-mass spectrometry on a chemical mixture comprising at least two prostaglandins, said method comprising:
  - a) performing a liquid chromatographic separation of said mixture, thereby generating an eluent;
  - b) using sheath flow, adding a basic liquid to said eluent to generate a diluted eluent; and
  - c) performing mass spectrometry on said diluted eluent.
2. (original) The method of claim 1, wherein said prostaglandins are PGD<sub>2</sub> and PGE<sub>2</sub>.
3. (original) The method of claim 1, wherein performing said mass spectrometry comprises ionizing said diluted eluent by electrospray ionization.
4. (original) The method of claim 1, wherein said liquid chromatographic separation is performed under acidic conditions.
5. (original) The method of claim 1, wherein performing said mass spectrometry comprises performing tandem mass spectrometry.
6. (original) The method of claim 5, wherein said tandem mass spectrometry comprises MS<sup>4</sup>.
- 7-10. (canceled)
11. (new) The method of claim 1, wherein said prostaglandins are isobaric.
12. (new) The method of claim 1, wherein said prostaglandins are isomers.

13. (new) The method of claim 1, wherein performing said mass spectrometry comprises performing mass spectrometry in the negative mode.
14. (new) The method of claim 1, wherein the basic liquid comprises ammonium hydroxide.
15. (new) The method of claim 1, wherein the basic liquid comprises acetonitrile.
16. (new) The method of claim 1, wherein the eluent comprises acetic acid.
17. (new) The method of claim 1, wherein the eluent comprises acetonitrile.
18. (new) A method for performing liquid chromatography-mass spectrometry on a chemical mixture comprising at least two prostaglandins, said method comprising:
  - a) performing a liquid chromatographic separation of said mixture, thereby generating an eluent;
  - b) adding a basic liquid to said eluent to generate a diluted eluent; and
  - d) performing mass spectrometry on said diluted eluent.
19. (new) The method of claim 18, wherein said prostaglandins are PGD<sub>2</sub> and PGE<sub>2</sub>.
20. (new) The method of claim 18, wherein performing said mass spectrometry comprises ionizing said diluted eluent by electrospray ionization.
21. (new) The method of claim 18, wherein said liquid chromatographic separation is performed under acidic conditions.
22. (new) The method of claim 18, wherein performing said mass spectrometry comprises performing tandem mass spectrometry.

23. (new) The method of claim 22, wherein said tandem mass spectrometry comprises MS<sup>4</sup>.
24. (new) The method of claim 18, wherein said prostaglandins are isobaric.
25. (new) The method of claim 18, wherein said prostaglandins are isomers.
26. (new) The method of claim 18, wherein performing said mass spectrometry comprises performing mass spectrometry in the negative mode.
27. (new) The method of claim 18, wherein the basic liquid comprises ammonium hydroxide.
28. (new) The method of claim 18, wherein the basic liquid comprises acetonitrile.
29. (new) The method of claim 18, wherein the eluent comprises acetic acid.
30. (new) The method of claim 18, wherein the eluent comprises acetonitrile.